260000 270000 280000 290000

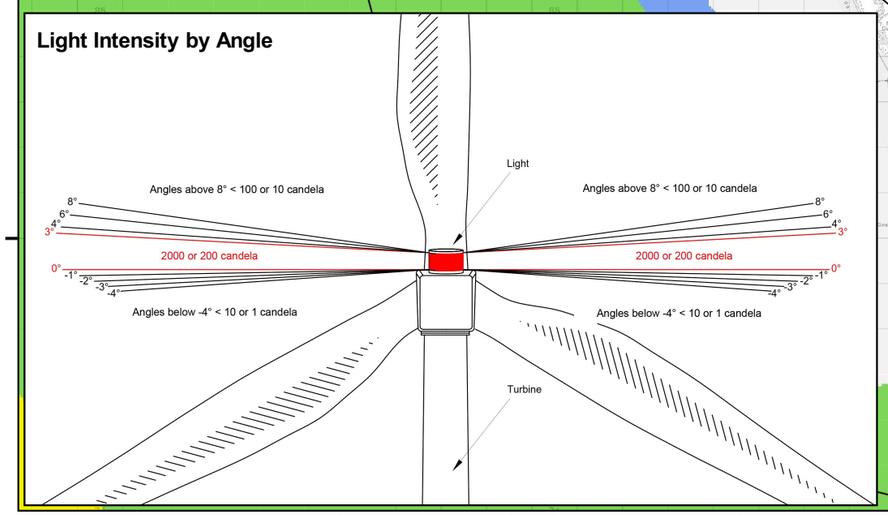
200000

190000

180000

15 km

5 km



Project:

Y Bryn Wind Farm, Neath Port Talbot/Bridgend

Title:

Figure 8.83e: Theoretical Visibility of Aviation Lighting by Intensity - Turbine 5

Key

- Turbine 5
- Other proposed turbine
- Viewpoint
- Night-time viewpoint
- Distance from outermost turbines

Theoretical visibility of predicted lighting intensity

- 0° to 3° (2000 candela)
- 3° to 4° (2000 candela reducing to 1400 candela)
- 0° to -1° (2000 candela reducing to 750 candela)
- -1° to -2° (750 candela reducing to 80 candela)
- -2° to -3° (80 candela reducing to 40 candela)
- -3° to -4° (40 candela reducing to < 10 candela)

Zone of Theoretical Visibility (ZTV) notes:

* ZTV demonstrates potential visibility of the aviation warning lighting only. Whole or parts of turbines themselves may be visible where no lighting is illustrated.
* ZTV represents worst case scenario as current CAA requirements allow reduction of lighting intensity to 200 candela beyond 5 km.
* Predicted visible lighting intensity does not take account of distance.
* Visibility takes earth curvature and atmospheric refraction into account, but not daylight/weather conditions, buildings, trees or other surface obstacles.
* ZTVs calculated individually at a range of vertical angles for 1 turbine (T9) at 175.5 m nacelle height, 2 turbines (T6 & T7) at 155.5 m nacelle height, with other lit turbines at 131.5 m nacelle height.
* Viewpoint height set at 2 m AGL.

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Scale @ A3: 1:135,000

Coordinate System: British National Grid

0 1 2 3 4 5 km

N

Date: 30-05-23	Prepared by: DH	Checked by: RO
Ref: GB201891_M_074_D	Layout: 091222_18t_A	

Drawing by:
The Natural Power Consultants Limited
Harbour House,
Y Lanfa,
Aberystwyth,
SY23 1AS, UK
Tel: +44 (0) 1970 636869
Email: sayhello@naturalpower.com
www.naturalpower.com

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